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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/797,006

Applicant(s)

TSAO, HSI-KANG

Examiner

Thomas E. Satkiewicz

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/302)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed 7/16/2008 has been entered. Claims 8 and 45 have been amended. The terminal disclaimer has been approved. No Claims have been cancelled. No claims have been added. Claims 1-45 are still pending in this application, with claims 1, 8, 17, 24, 31, 38, and 45 being independent.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Claims 1-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (U.S. 5,899,810) in view of Hutcheson et. Al. (U.S. 6,947,761), further in view of Mallart (U.S. 6,557,041).

With regards to Claim 1, Smith teaches a method of implementing real-time video-audio interaction (SIMNET; Col 1, Lines 10-25; SIMNET is real-time distributed

simulator for combat simulation) by data synchronization in an Internet game (Column 1, Lines 11-17), comprising the steps of: establishing an Internet transmission channel (Queue Server; Fig 2, 41 and 43; Column 3, Line 14) between a first internet game client and a second internet game client (Game Client, 21-24; Fig 1; Column 2, Line 66), wherein the Internet transmission channel (Queue Server; Fig 2, 41 and 43; Column 3, Line 14) is connected to an Internet game server (Game Server, 31-33; Fig 2; Column 3, Line 11); executing an internet game in the first Internet game client (Mobile Game Client, 200; Fig 2; Column 8, Line 9) and the second internet game client (Mobile Game Client, 200; Fig 2; Column 8, Line 9) and connecting the first and second Internet game clients (Mobile Game Client, 200; Fig 2; Column 8, Line 9) to the internet game server (Mobile Game Server, 300; Fig 2; Column 8, Lines 8) ; retrieving first real-time video data and first real-time audio data (Receives the New Plan, Block 107; Fig 4; Column 4, Line 31) in the first internet game client (Mobile Game Client, 200; Fig 2; Column 8, Line 9) in the Internet game (Internet-Based Gaming Systems; Column 9, Lines 55-56).

However, Smith fails to disclose packaging the first video data frames and the first audio data packets into a transmission package in the first Internet game client and attaching a time stamp to transmission package, wherein the time stamp expresses the synchronous relationship between the first real-time video and audio data transmitting the transmission package to the second Internet game client through the Internet transmission channel.

However, Hutcheson et al. does teach the client synchronization means is preferably a client system clock adapted to time stamp the game information that is communicated (Column 9, Lines 44-63).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Smith's invention with Hutcheson's invention, because Smith would use a Time Stamp to the synchronize the movement of one game proxy of one game client to computing the new location of this game proxy on the screens of all the other game clients, so that all game clients were looking at the same game conditions.

Smith also fails to disclose the synchronizing of the second real-time video and audio data according to the time stamp, and outputting the second real-time audio and video data in the second Internet game client in the Internet game

However, Hutcheson et al. does teach the synchronization of the second real-time video and audio data according to the time stamp, and outputting the second real-time audio and video data in the second internet game client in the internet game. (Column 9, Lines 59-63).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Smith's invention with Hutcheson's invention, because Smith would synchronize the second real-time video and audio data, because if Smith did not synchronize the second real-time video and audio data only one game proxy would move on all the game client's screens which would not allow for a good virtual game playing.

Smith fails to disclose compressing/encoding (Compressing is the Reduction in Size of Data in Order to Save Space or Transmission Time)(Encoding is the process of transforming information from one format into another) the first real-time video data into a plurality of first video data frames, and compressing/encoding the first real-time audio data into a plurality of first audio data packets in the first Internet game client; decoding (Decoding is the reverse of encoding) the transmission package into second real-time video data and second real-time audio data in the second Internet game client.

However, Hutcheson et al. does teach compression of data for transfer (Column 21, Lines 34-40) , encoding, and decoding (Column 11, Lines 5-15) of Audio and Video data packets for changing the game state.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Smith's invention with Hutcheson's invention to more efficiently utilize the limited bandwidth.

However, Smith fails to disclose the Internet transmission channel is not connected to an Internet game server.

However, Mallart discloses the Internet transmission channel (Share Objects, 616 and 618; Fig 6; Column 8, Line 56) is not connected (With Each Other, But Not with Server; Column 8, Lines 56-57) to an Internet game server (Server, 302; Fig 6; Column 8, Line 57).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply a known technique of not connecting an

Internet transmission channel to an Internet game server, but to connect the Internet Transmission Channel from one Internet Game Client to a second Internet Game Client, because the direct connection of the Internet Transmission Channel to both Internet Game Clients would increase the speed of the movement of both Internet Game Client's proxies and that is an improvement which will yield predictable results (See KSR – MPEP 2143). Therefore, it would have been obvious to a person of ordinary skill in the art to incorporate the use of Mallart in Smith, because Mallart's method have the Game Proxies moving quicker on the screens of all Internet Game Clients, which makes the Internet Game more realistic.

With regards to Claim 2, Smith teaches a method, wherein the establishment of the Internet transmission channel (Queue Servers 41 and 43 thus provide the Lines; Fig 2; Column 3, Lines 16-17) further comprises the steps of: designating an Internet address (Internet, 11; Fig 1; Column 2, Line 54) of the second Internet game client (Game Client, 21-24; Fig 1; Column 2, Line 66) directly or according a directory by the first Internet game client (Game Client, 21-24; Fig 1; Column 2, Line 66), wherein the directory (Track and Coordinate the Definitive State of the Game: Column 4, Lines 3-4) includes the Internet address (Internet, 11; Fig 1; Column 2, Line 54) of the second Internet game client (Game Client, 21-24; Fig 1; Column 2, Line 66); transmitting a connection (Operator of the Particular Game will Distribute Program Components to the Client Users; Column 3, Lines 28-29) request from the first Internet game client (Game Client, 21-24; Fig 1; Column 2, Line 66) to the second Internet game client (Game Client, 21-24; Fig 1; Column 2, Line 66); and establishing the Internet transmission

channel (Impact Input; Column 2, Line 3) by the second Internet game client (Game Client, 21-24; Fig 1; Column 2, Line 66) in response to the connection request (Operating System, 210 ; Fig 3a; Column 9, Line 23).

With regards to Claim 3, Smith in view of Hutcheson teaches a method, wherein if the bandwidth (Hutcheson: Bandwidth; Column 9, Line 31) of the Internet transmission channel (Hutcheson: Wireless Communication Network, 100; Fig 4; Column 8, Lines 58-59) cannot transmit the first real-time audio data and the first real-time video data simultaneously (Hutcheson: Client Synchronization Means, 230; Fig 3a; Column 9, Line 45), the first real-time audio data takes priority over first real-time video data (Hutcheson: Session Management Means, 240; Fig 3a; Column 9, Lines 64-66).

With regards to Claim 4, Smith in view of Hutcheson teaches a method, wherein the time stamp (Hutcheson: Time Stamp; Column 9, Line 48) provides is time information (Hutcheson: Time Management System; Column 9, Line 56) required to produce the first real-time video data and the real-time audio data (Hutcheson: Session Management Means, 240; Fig 3a; Column 9, Lines 64-66).

With regards to Claim 5, Smith in view of Hutcheson et al. teaches a method, wherein the synchronization (Hutcheson: Client Synchronization, 230; Fig 3a; Column 9, Line 45) is achieved by adding the system time (Hutcheson: Time Stamp; Column 9, Line 48) of the second internet game client (Hutcheson: Mobile Game Clients, 200; Fig 3a; Column 9, Line 66) to the time stamp (Hutcheson: Time Stamp; Column 9, Line 48)

to generate the display time of the second real-time video and audio data (Hutcheson: Session Management Means, 240; Fig 3a; Column 9, Lines 64-66).

With regards to Claim 6, Smith in view of Hutcheson teaches a method, wherein synchronization (Hutcheson: Client Synchronization, 230; Fig 3a; Column 9, Line 45) is achieved by comparing the time stamp (Hutcheson: Time Stamp; Column 9, Line 48) the amount of the frames dropped (Hutcheson: Degrees of Freedom; Column 5, Line 31-34) by the second real-time video data (Hutcheson: Session Management Means, 240; Fig 3a; Column 9, Lines 64-66).

With regards to Claim 7, Smith in view of Hutcheson teaches a method, wherein playback (Hutcheson: Return; Column 11, Line 14) of the second real-time video data (Hutcheson: Degrees of Freedom Management Means, 246; Fig 3a; Column 11, Line 5) is accomplished by integrating the second real-time video data into the game environments (Hutcheson: Global Game State; Column 11, Line 15) of the Internet game as texture mapping (Hutcheson: Degree of Freedom, 246; Fig 3a; Column 12, Lines 2-3).

With regards to Claim 8, Smith in view of Hutcheson and further in view of Mallart teaches a system of implementing real-time video-audio interaction by data synchronization in an Internet game (Interactive Game; Column 2, Line 51), comprising: an Internet game server (Game Servers, 31-33; Fig 2; Column 3, Lines 9), executing an Internet game (Interactive Game; Column 2, Line 51); and a plurality of Internet game clients (Game Client, 21-24; Fig 1; Column 2, Line 66), comprising a first Internet game client (Game Client, 21-24; Fig 1; Column 2, Line 66), a second Internet

game client (Game Client, 21-24; Fig 1; Column 2, Line 66), and an internet transmission channel (Queue Server; Fig 2, 41 and 43; Column 3, Line 14), the first and the second Internet game clients (Game Client, 21-24; Fig 1; Column 2, Line 66) connecting to the Internet game server (Game Servers, 31-33; Fig 2; Column 3, Lines 9), the internet transmission channel coupled to the first Internet game client (Game Client, 21-24; Fig 1; Column 2, Line 66) and the second Internet game client (Game Client, 21-24; Fig 1; Column 2, Line 66), wherein the Internet transmission channel (Queue Server; Fig 2, 41 and 43; Column 3, Line 14) is connected to an Internet game server (Game Servers, 31-33; Fig 2; Column 3, Lines 9).

However, Smith fails to teach the Internet transmission channel is not connected to an Internet game server. See rejection of Claim 1 above.

With regards to Claim 9, Smith teaches a system wherein the first internet game client further comprises: a real-time data retriever (SIMNET/DIS; Column 1, Line 15), retrieving first real-time video data and first real-time audio data (Receives the New Plan, Block 107; Fig 4; Column 4, Line 31) from the first Internet game client (Game Client, 21-24; Fig 1; Column 2, Line 66);

However, Smith fails to disclose a data encoder (Device to Change a Signal), coupled to the real-time data retriever, compressing/encoding the first real-time video data into a plurality of first video data frames, and compressing/encoding the first audio data into a plurality of first audio data packets; transmission packager, coupled to the data encoder, packaging the first video data frames and the first audio data packets into a transmission package and attaching a time stamp into the transmission package,

wherein the time stamp expresses the synchronous relationship between the first real-time video data and the first real-time audio data; and an Internet sender, coupled to the transmission packager, transmitting the transmission package to the second Internet game client through the Internet transmission channel.

However, Hutcheson does teach a data encoder (Encodes; Column 14, Line 10), coupled to real-time data retriever (Degrees of Freedom Means, 346; Fig 3b; Column 14, Line 9), compressing/encoding (Communicated; Column 9, Line 48) first real-time video data (Game Information; Column 9, Line 48) into a plurality of first video data frames (Game Information; Column 9, Line 48), and compressing/encoding (Communicated; Column 9, Line 48) the first audio data (Game Information; Column 9, Line 48) into a plurality of first audio data packets (Game Information; Column 9, Line 48); transmission packager (Communication Means, 220; Fig 3a; Column 9, Lines 33-34), coupled to the data encoder (Encodes; Column 14, Line 10), packaging (Packages and Unpackages; Column 9, Line 34), the first video data frames (Game Information; Column 9, Line 48) and the first audio data packets (Game Information; Column 9, Line 48) into a transmission package (Packages and Unpackages; Column 9, Line 34) and attaching a time stamp (Time Stamp; Column 9, Line 48) into the transmission package (Packages and Unpackages; Column 9, Line 34), wherein the time stamp (Time Stamp; Column 9, Line 48) expresses the synchronous (Synchronized; Column 9, Line 52) relationship between the first real-time video data and the first real-time audio data (Game Information; Column 9, Line 48); and an Internet sender (Mobile Game Client, 200; Fig 3a; Column 9, Line 44), coupled to the

transmission packager (Communication Means, 220; Fig 3a; Column 9, Lines 33-34), transmitting the transmission package (Packages and Unpackages; Column 9, Line 34) to the second Internet game client (All Mobile Game Clients, 200; Fig 3a; Column 9, Lines 60-61) through the Internet transmission channel (Wireless Communication Network, 100; Fig 2; Column 9, Line 14).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Smith's invention with Hutcheson's invention, because Smith discusses Updating Data (Column 4, Line 44) and the reason to time stamp data and synchronize data is to update the data.

However, Smith fails to disclose compressing/encoding the first real-time video data into a plurality of first video data frames, and compressing/encoding the first audio data into a plurality of first audio data packets.

However, Hutcheson et al. does teach compression of data for transfer (Data Transfer Requirement; Column 21, Lines 38), encoding, and decoding (Encodes; Column 14, Line 10) of Audio and Video data packets for changing the game state.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Smith's invention with Hutcheson's invention to more efficiently utilize the limited bandwidth.

With regards to Claim 10, Smith in view of Hutcheson and further in view of Mallart teaches the Internet transmission channel (Mallart: State Info, 616 and 618; Fig 6; Column 8, Line 56) is not connected to an Internet game server (Mallart: Server, 302; Fig 6; Column 8, Line 57) teaches a system, wherein if the bandwidth (Mallart:

Bandwidth usage; Column 2, Line 55) of the Internet transmission channel (Mallart: State Info, 616 and 618; Fig 6; Column 8, Line 56) cannot transmit (Mallart: Several Limitations; Column 2, Line 54) the first real-time audio data (Mallart: Multimedia File: column 4, Line 19) and the first real-time video data (Mallart: Multimedia File: Column 4, Line 19) simultaneously (Mallart: Complete Download; Column 2, Line 46), the first real-time audio data (Mallart: Multimedia File: Column 4, Line 19) takes priority over first real-time video data (Mallart: Multimedia File: Column 4, Line 19).

With regards to Claim 11, Smith in view of Hutcheson teaches a system, wherein the time stamp (Hutcheson: Time Stamp; Column 9, Line 48) provides the time information (Hutcheson: Time Management System; Column 9, Line 59) required to produce the first real-time video data (Hutcheson: Game Information; Column 9, Line 48) and the first real-time audio data (Hutcheson: Game Information; Column 9, Line 48).

With regards to Claim 12, Smith in view of Hutcheson teaches a system, wherein the second Internet game client (Hutcheson: Mobile Game Client, 200; Fig 3a; Column 9, Line 44) further comprises: a data decoder (Hutcheson: Encodes; Column 14, Line 10), coupled to the Internet transmission channel (Hutcheson: Wireless Communication Network, 100; Fig 2; Column 9, Line 14), decoding (Hutcheson: Encodes; Column 14, Line 10) the transmission package (Hutcheson: Packages and Unpackages; Column 9, Line 34) into second video data (Hutcheson: Game Information; Column 9, Line 48) and second audio data (Hutcheson: Game Information; Column 9, Line 48); a video-audio playback system , coupled to the data

decoder (Hutcheson: Encodes; Column 14, Line 10), synchronizing (Hutcheson: Synchronized; Column 9, Line 52) the second real-time video (Hutcheson: Game Information; Column 9, Line 48) and the second real-time audio data (Hutcheson: Game Information; Column 9, Line 48) according to the time stamp (Hutcheson: Time Stamp; Column 9, Line 48) and outputting the second video data (Hutcheson: Game Information; Column 9, Line 48) and the second audio data (Hutcheson: Game Information; Column 9, Line 48).

With regards to Claim 13, Smith in view of Hutcheson et al. teaches a system, wherein synchronization (Hutcheson: Synchronized; Column 9, Line 52) is achieved by adding the system time (Hutcheson: Time Stamp; Column 9, Line 48) of the second internet game client (Hutcheson: Mobile Game Client, 200; Fig 3a; Column 9, Line 44) to the time stamp (Hutcheson: Time Stamp; Column 9, Line 48) to generate the display time (Hutcheson: Time Management System; Column 9, Line 59) of the second real-time video and audio data (Hutcheson: Game Information; Column 9, Line 48).

With regards to Claim 14, Smith in view of Hutcheson teaches a system; wherein synchronization (Hutcheson: Synchronized; Column 9, Line 52) is achieved by comparing the time stamp (Hutcheson: Time Stamp; Column 9, Line 48) the amount of the frames (Hutcheson: Degrees of Freedom; Column 5, Lines 31-34) dropped (Transmitted; Column 11, Line 18) by the second real-time video data (Hutcheson: Game Information; Column 9, Line 48).

With regards to Claim 15, Smith in view of Hutcheson teaches a system, wherein the video-audio playback (Hutcheson: Return; Column 11, Line 14) system

integrates the second real-time video data (Hutcheson: Game Information; Column 9, Line 48) into the game environments of the Internet game as texture mapping (Hutcheson: Degree of Freedom, 246; Fig 3a; Column 12, Lines 2-3).

With regards to Claim 16, Smith teaches in view of Hutcheson teaches a system, wherein the internet transmission channel (Hutcheson: Wireless Communication Network, 100; Fig 4; Column 8, Lines 58-59) is established by assigning an Internet address (Hutcheson: Preferably Specific to the Client; Column 20, Line 7) to the second Internet game client (Hutcheson: Mobile Game Client, 200; Fig 3a; Column 9, Line 44) directly or according to a directory (Hutcheson: Game Object Library, 348; Column 13, Line 16) by the first Internet game client (Hutcheson: Mobile Game Client, 200; Fig 3a; Column 9, Line 44), transmitting a connecting request from the first Internet game client (Hutcheson: Mobile Game Client, 200; Fig 3a; Column 9, Line 44) to the second Internet game client (Hutcheson: Mobile Game Client, 200; Fig 3a; Column 9, Line 44), and the second Internet game client (Hutcheson: Mobile Game Client, 200; Fig 3a; Column 9, Line 44) establishing the Internet transmission channel (Hutcheson: Wireless Communication Network, 100; Fig 4; Column 8, Lines 58-59) according to the connecting request (Hutcheson: Enable Communication; Column 19, Line 49), wherein the directory (Hutcheson: Game Object Library, 348; Fig 3b; Column 13, Line 16) includes the Internet address (Hutcheson: Preferably Specific to the Client; Column 20, Line 7) of the second Internet game client (Hutcheson: Mobile Game Client, 200; Fig 3a; Column 9, Line 44).

With regards to Claim 17, Smith teaches a method of implementing real-time interaction by video-audio synchronization (Track and Coordinate the Definitive State of the Game; Column 4, Lines 3-4) between; Internet game clients (Game Client, 21-24; Fig 1; Column 2, Line 66), wherein the Internet game client (Game Client, 21-24; Fig 1; Column 2, Line 66) connects to an Internet game server (Host Computer; Column 4, Line 3), and executes an Internet game (Virtual World; Column 4, Line 6), comprising the steps of: establishing an internet transmission channel (Queue Server; Fig 2, 41 and 43; Column 3, Line 14) to an external Internet game client (Game Client, 21-24; Fig 1; Column 2, Line 66), wherein the Internet transmission channel (Queue Server; Fig 2, 41 and 43; Column 3, Line 14) is connected to the Internet game server (Column 3, Lines 6-12); a real-time data retriever retrieving first real-time video data and first real-time audio data (Receives the New Plan, Block 107; Fig 4; Column 4, Line 31).

However, Smith fails to disclose the Internet Transmission Channel is not connected to the Internet game server, compressing/decoding the first real-time video data and the first real-time audio data and attaching a time stamp to the transmission package wherein the time stamp expresses the synchronous relationship between the video and audio data; transmitting the first transmission package through the Internet transmission channel; receiving a second transmission package through the Internet transmission channel; decompressing/decoding the second transmission package into second real-time video data and second real-time audio data; and synchronizing the second real-time video and the second real-time audio data according to the time

stamp, and outputting the second real-time audio data and video data in the game environment. See the rejection of Claim 1 above.

With regards to Claim 18, Smith teaches a method, wherein the establishment of the Internet transmission channel (Queue Server; Fig 2, 41 and 43; Column 3, Line 14) further comprises the steps of: designating an Internet address (Internet, 11; Fig 1; Column 2, Line 54) of a third external Internet game client (Game Client, 21-24; Fig 1; Column 2, Line 66) by the Internet game client (Game Client, 21-24; Fig 1; Column 2, Line 66) or the external Internet game client (Game Client, 21-24; Fig 1; Column 2, Line 66); transmitting a connecting request (Initially Received; Column 3, Line 67) to the third Internet game client (Game Client, 21-24; Fig 1; Column 2, Line 66) by the Internet game client (Game Client, 21-24; Fig 1; Column 2, Line 66) or the external Internet game client (Game Client, 21-24; Fig 1; Column 2, Line 66) according to the Internet address (Internet, 11; Fig 1; Column 2, Line 54); and establishing the Internet transmission channel (Queue Server; Fig 2, 41 and 43; Column 3, Line 14) between the Internet game client (Game Client, 21-24; Fig 1; Column 2, Line 66) and the third Internet game client (Game Client, 21-24; Fig 1; Column 2, Line 66).

With regards to Claim 19, Smith in view of Hutcheson teaches a method, wherein if the bandwidth of the internet transmission channel cannot transmit the first real-time audio data and the first real-time video data simultaneously, the first real-time audio data takes priority over first real-time video data. See the rejection of claim 10 above.

With regards to Claim 20, Smith in view of Hutcheson teaches a method, wherein in the establishing step, the Internet transmission channel (Hutcheson: Wireless Communication Network, 100; Fig 4; Column 8, Lines 58-59) is established according to a directory (Hutcheson: Game Object Library, 348; Column 13, Line 16), having an Internet address (Hutcheson: Preferably Specific to the Client; Column 20, Line 7) of the third external Internet game client (Hutcheson: Mobile Game Client, 200; Fig 3a; Column 9, Line 44).

With regards to Claim 21, Smith in view of Hutcheson teaches a method, wherein synchronization (Hutcheson: Synchronized; Column 9, Lines 52) is achieved by adding the system time (Hutcheson: Client System Clock; Column 9, Line 47) of the second internet game client (Hutcheson: All Mobile Game Clients; Column 9, Lines 60-61) to the time stamp (Hutcheson: Synchronized; Column 9, Lines 52)) to generate the display time (Hutcheson: Client System Clock; Column 9, Line 47) of the second real-time video and audio data (Hutcheson: Game State Information; Column 9, Line 29-30).

With regards to Claim 22, Smith in view of Hutcheson teaches a method, wherein synchronization (Hutcheson: Synchronized; Column 9, Lines 52) is achieved by comparing the time stamp (Hutcheson: Synchronized; Column 9, Lines 52) the amount of the frames dropped (Hutcheson: Degrees of Freedom, 246; Column 10, Line 3) by the second real-time video data (Hutcheson: Game State Information; Column 9, Line 29-30).

With regards to Claim 23, Smith in view of Hutcheson teaches a method, wherein playback of the second video data is accomplished by integrating the second real-time video data into the game environment as texture mapping. See the rejection of Claim 15 above.

With regards to Claim 24, Smith in view of Hutcheson and further in view of Mallart teaches a storage medium for storing (Reference Characters, 31-33; Column 3, Lines 3-4) a computer program (Overall and Historical Data; Column 3, Line 6) providing a method of implementing real-time video-audio interaction by data synchronization between Internet game clients, wherein the Internet game client connects to an Internet game server, and executes an Internet game, the computer program comprising using a computer to perform the steps of: establishing an Internet transmission channel to an external Internet game client, wherein the Internet transmission channel is not connected to the Internet game server; a real-time data retriever retrieving first real-time video data and first real-time audio data; compressing/decoding the first real-time video data and the first real-time audio data into a first transmission package, and attaching a time stamp into the transmission package, wherein the time stamp expresses the synchronous relationship between the video and audio data; transmitting the first transmission package through the Internet transmission channel; receiving a second transmission package through the Internet transmission channel; decompressing/decoding the second transmission package into second real-time video data and second real-time audio data; and synchronizing the second real-time video and the second real-time audio data according to the time

stamp, and outputting the second real-time audio data and video data in the game environment. See the rejection of Claim 1 above.

With regards to Claim 25, Smith in view of Hutcheson teaches method, wherein establishment of the Internet transmission channel further comprises the steps of: designating an Internet address of a third external Internet game client by the Internet game client or the external Internet game client; transmitting a connecting request to the third Internet game client by the Internet game client or the external Internet game client according to the Internet address; and establishing the Internet transmission channel between the Internet game client and the third Internet game client. See the rejection of Claim 18 above.

With regards to Claim 26, Smith teaches a method, wherein if the bandwidth of the internet transmission channel cannot transmit the first real-time audio data and the first real-time video data simultaneously, the first real-time audio data takes priority over first real-time video data. See the rejection of Claim 10 above.

With regards to Claim 27, Smith in view of Hutcheson teaches a method, wherein in the establishing step, the Internet transmission channel is established according to a directory, having an Internet address of the third external Internet game client. See the rejection of Claim 20 above.

With regards to Claim 28, Smith in view of Hutcheson teaches a method, wherein synchronization is achieved by adding the system time of the second internet game client to the time stamp to generate the display time of the second real-time video and audio data. See the rejection of Claim 21 above.

With regards to Claim 29, Smith in view of Hutcheson teaches a method, wherein synchronization is achieved by comparing the time stamp the amount of the frames dropped by the second real-time video data. See the rejection of Claim 22..

With regards to Claim 30, Smith in view of Hutcheson teaches a method, wherein playback of the second video data is accomplished by integrating the second real-time video data into the game environment as texture mapping. See the rejection of Claim 15 above.

With regards to Claim 31, Smith in view of Hutcheson and further in view of Mallart teaches a computer system of an Internet game, executing an Internet game and having a storage medium for storing a computer program, wherein the computer program is applied to a computer system and executes the method of real-time video-audio interaction between Internet game clients, the Internet game client connecting to an Internet game server executing, executing an Internet game, and outputting a game environment, the method comprising the steps of: establishing an Internet transmission channel to an external Internet game client, wherein the Internet transmission channel is not connected to the Internet game server; a real-time data retriever retrieving first real-time video data and first real-time audio data; compressing/decoding the first real-time video data and the first real-time audio data into a first transmission package, and attaching a time stamp into the transmission package, wherein the time stamp expresses the synchronous relationship between the video and audio data; transmitting the first transmission package through the Internet transmission channel; receiving a second transmission package through the Internet transmission channel;

decompressing/decoding the second transmission package into second real-time video data and second real-time audio data; and synchronizing the second real-time video and the second real-time audio data according to the time stamp, and outputting the second real-time audio data and video data in the game environment. See the rejection of Claim 1 above.

With regards to Claim 32, Smith in view of Hutcheson teaches a method, wherein the establishment of the Internet transmission channel further comprises the steps of: designating an Internet address of a third external Internet game client by the Internet game client or the external Internet game client; transmitting a connecting request to the third Internet game client by the Internet game client or the external Internet game client according to the Internet address; and establishing the Internet transmission channel between the Internet game client and the third Internet game client. See the rejection of Claim 18 above.

With regards to Claim 33, Smith in view of Hutcheson teaches a bandwidth of the internet transmission channel cannot transmit the first real-time audio data and the first real-time video data simultaneously; the first real-time audio data takes priority over first real-time video data. See the rejection of Claim 10 above.

With regards to Claim 34, Smith teaches a method, wherein in the establishing step, the Internet transmission channel is established according to a directory, having an Internet address of the third external Internet game client. See the rejection of Claim 20 above.

With regards to Claim 35, Smith in view of Hutcheson teaches a method, wherein synchronization is achieved by adding the system time of the second internet game client to the time stamp to generate the display time of the second real-time video and audio data. See the rejection of Claim 21 above.

With regards to Claim 36, Smith in view of Hutcheson teaches a method; wherein synchronization is achieved by comparing the time stamp the amount of the frames dropped by the second real-time video data. See the rejection of Claim 22 above.

With regards to Claim 37, Smith in view of Hutcheson teaches a method, wherein playback of the second video data is accomplished by integrating the second real-time video data into the game environment as texture mapping. See the rejection of claim 15 above.

With regards to Claim 38, Smith teaches a method of implementing real-time video-audio interaction by data synchronization in an internet game for applying in a first Internet game client and a second Internet game client, wherein the first and second Internet game client execute an Internet game and connect to an Internet game server, comprising the steps of: establishing an Internet transmission channel between the first Internet game client and the second Internet game client, wherein the Internet transmission channel is not connected to the Internet game server; retrieving first real-time video data and first real-time audio data in the first Internet game client; producing a plurality of first video data frames and a plurality of first audio data packets; packaging the first video data frames and the first audio data packets into a

transmission package and attaching a time stamp into the transmission package, wherein the time stamp expresses the synchronous relationship between the first real-time video and audio data; transmitting the transmission package to the second Internet game client; decoding the transmission package into second real-time video data and second real-time audio data; and synchronizing the second real-time audio and video data according to the time stamp, and outputting the second real-time audio data and video data in the Internet game in the second Internet game client. See the rejection of claim 1 above.

With regards to Claim 39, Smith teaches a method, wherein the establishing step further comprises the steps of: designating an Internet address of the second Internet game client directly or according to a directory by the first Internet game client, wherein the directory includes the Internet address of the second Internet game client; transmitting a connection request from the first Internet game client to the second Internet game client; and establishing the Internet transmission channel by the second Internet game client in response to the connection request. See the rejection of claim 18 above.

With regards to Claim 40, Smith in view of Hutcheson teaches a method, wherein the first real-time audio data (Hutcheson: Game Information; Column 9, Line 34) is primarily packaged (Hutcheson: Communication Means, 220; Fig 3a; Column 9, Lines 33-34) in the first transmission package (Packages and Unpackages; Column 9, Line 34), and the remaining bandwidth (Limited Bandwidth; Column 9,

Line 31) is used for packaging (Packages and Unpackages; Column 9, Line 34) the first real-time video data (Hutcheson: Game Information; Column 9, Line 34).

With regards to Claim 41, Smith in view of Hutcheson teaches a method, wherein the first video data frames (Hutcheson: Size of the Frame; Column 21, Lines 56-57) and the first audio data frames (Hutcheson: Size of the Frame; Column 21, Lines 56-57) are produced by compressing/encoding (Hutcheson: Further Compress the Data Transfer Requirement; Column 21, Lines 37-38)

With regards to Claim 42, Smith in view of Hutcheson and further in view of Mallart teaches a method, wherein the transmission package (Mallart: Shared Objects, 616 and 618; Fig 6; Column 8, Line 56) is transmitted (Hutcheson: With Each Other; Column 8, Line 56) to the second Internet game client (Hutcheson: Client, 604; Fig 6; Column 8, Line 55) through the Internet Transmission channel (Not With Server, 302; Fig 6; column 8, Lines 56-57).

With regards to Claim 43, Smith in view of Hutcheson teaches a method, wherein the synchronization (Hutcheson: Synchronized; Column 9, Line 52) is based on system time (Hutcheson: Client System Clock; Column 9, Line 47) of the second Internet game client (Hutcheson: Mobile Game Client, 200; Fig 3a; Column 9, Line 44) adding the time stamp (Hutcheson: Time Stamp; Column 9, Line 48) as display time (Time Management System; Column 9, Line 56) of the second real-time video and audio data (Hutcheson: Game Information; Column 9, Lines 48).

With regards to Claim 44, Smith in view of Hutcheson teaches a method, wherein synchronization is achieved by comparing the time stamp the amount of the frames

dropped by the second real-time video data. See the rejection of claim 22 above.

With regards to Claim 45, Smith in view of Hutcheson and further in view of Mallart teaches a system of implementing real-time video-audio interaction (Hutcheson: Real-Time Situations; Column 15, Line 8) by data synchronization (Hutcheson: Synchronization Mechanism; Column 15, Lines 65-66) in an Internet game (Hutcheson: Interactive Gaming Environment; Column 15, Line 13) for application (Hutcheson: Entity State Protocol Data Units; Column 15, Line 20) to a first Internet game client (Hutcheson: Mobile Game Client, 200; Fig 3a; Column 9, Line 44), a second Internet game client (Hutcheson: Mobile Game Client, 200; Fig 3a; Column 9, Line 44), and an internet game server (Hutcheson: Mobile Game Server, 300; Fig 3b; Column 12, Lines 37), wherein the Internet game server (Hutcheson: Mobile Game Server, 300; Fig 3b; Column 12, Lines 37) executes an Internet game (Hutcheson: Internet-Based Gaming System; Column 9, Lines 55-56), the system comprising: an Internet transmission channel (Hutcheson: Wireless connection Protocol, 260; Fig 3a and b; Column 17, Line 9), the first Internet game client (Hutcheson: Mobile Game Client, 200; Fig 3a; Column 9, Line 44) and the second Internet game client (Hutcheson: Mobile Game Client, 200; Fig 3a; Column 9, Line 44) connecting to the Internet game server (Hutcheson: Mobile Game Server, 300; Fig 3b; Column 12, Lines 37) to execute the Internet game (Column 3, Lines 3-12), the Internet transmission channel (Hutcheson: Wireless connection Protocol, 260; Fig 3a and b; Column 17, Line 9) coupled to the first and second Internet game clients (Hutcheson: Mobile Game Client, 200; Fig 3a; Column 9, Line 44) to execute real-time video-audio interaction (Mallart: Share Objects, 616 and 618; Fig 6;

Column 8, Line 56), wherein the Internet transmission channel (Mallart: But Not with Server; Column 8, Lines 56-57) is not connected to an Internet game server (Mallart: Server, 302; Fig 6; Column 8, Line 57).

Response to Arguments

5. Applicant's arguments with respect to claims 1, 17, 24, 31, and 38 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas E. Satkiewicz whose telephone number is (571) 270-1948. The examiner can normally be reached on Monday to Thursday 6:30AM to 3:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on (571) 272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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